

Application No.: 10/716,221

2

Docket No.: 245402007600

AMENDMENTS TO THE CLAIMS

Claim 1 (previously presented): A semiconductor laser device having a pair of cladding layers with an active layer interposed therebetween, wherein at least one of the cladding layers is of the same composition through an entire region of the cladding layer, excluding a dopant in the cladding layer, and has a stripe portion different in conductivity type from adjacent portions, and said stripe portion different in conductivity type from adjacent portions is formed by using at least two carrier material gases having different absorption rates into said cladding layer at a prescribed temperature and different conductivity types, and by creating a temperature distribution of crystal growth temperatures of said cladding layer.

Claim 2 (previously presented): The semiconductor laser device according to claim 1, wherein said stripe portion different in conductivity type from adjacent portions forms a channel portion or a current narrowing portion.

Claim 3 (previously presented): The semiconductor laser device according to claim 1, wherein when said stripe portion different in conductivity type from adjacent portions is formed in each cladding layer, said stripe portions are opposed to each other with said active layer interposed therebetween.

Claim 4 (currently amended): A semiconductor laser device having a pair of cladding layers with an active layer interposed therebetween, wherein ~~at least one of the~~ each cladding layer[[s]] is of the same composition through an entire region of the cladding layer, excluding a dopant in the cladding layer, and has a stripe portion different in conductivity type from adjacent portions, and

pa-1035507

Application No.: 10/716,221

3

Docket No.: 245402007600

at least one of said cladding layers is formed of two layers of separate inner and outer layers,
and
said stripe portions different in conductivity type from adjacent portions are opposed to each other with both of said active layer and the inner layer of the cladding layer interposed therebetween.

Claim 5 (canceled)

Claim 6 (previously presented): The semiconductor laser device according to claim 1, wherein said temperature distribution is created by laser radiation in the form of a stripe portion.

Claim 7 (previously presented): The semiconductor laser device according to claim 1, wherein said temperature distribution is created by scanning with laser light.

Claim 8 (previously presented): The semiconductor laser device according to claim 1, wherein all layers in said semiconductor laser device are flat.

Claim 9 (currently amended): The semiconductor laser device according to claim 4, wherein said temperature distribution is created by scanning with laser light, stripe portion different in conductivity type from adjacent portions forms a channel portion or a current narrowing portion.

Claim 10 (previously presented): The semiconductor laser device according to claim 4, wherein all layers in said semiconductor laser device are flat.

pa-1035507

Application No.: 10/716,221

4

Docket No.: 245402007600

Claim 11 (new): The semiconductor laser device according to claim 1, wherein when said cladding layer is formed of two layers of separate inner and outer layers, said stripe portions different in conductivity type from adjacent portions are opposed to each other with both of said active layer and the inner layer of the cladding layer interposed therebetween.

pa-1035507